植物分类学报
第18卷 第4期 ACTA PHYTOTAXONOMICA SINICA 1980年11月

辐花属——龙胆科一新属

何廷农 刘尚武*
(中国科学院西北高原生物研究所)

LOMATOGONIOPSIS T. N. HO ET S. W. LIU——A NEW GENUS OF GENTIANACEAE

Ho Ting-nung Liu Shang-wu
(*Northwest plateau Institute of Biology, Academia Sinica*)

辐花属 新属 图版 3

一年生草本。茎常自基部多分枝,铺散,稀单一,不分枝。单叶对生。花常多数,单生枝顶或呈伞房状聚伞花序,稀为单花,5 基数,辐状。花萼深裂,萼筒甚短。花冠深裂,冠筒甚短,裂片在蕾中向右旋转,开放时呈二色;无腺窝,而具5个与裂片对生的附属物,附属物膜质、片状,全缘或上部稍啮蚀状,基部绝不合生成管形,无脉纹。雄蕊着生于冠筒上,与裂片互生。子房一室,花柱不明显,柱头 2 裂,自雌蕊顶端沿心皮的缝合线下延。蒴果 2 瓣裂。种子多数,小,表面光滑。花粉粒近球形,略长,极面观为钝三角形。极轴长度为 36.5—41 微米,赤道轴长度为 34.8—40 微米。具三孔沟,沟细窄,内孔圆形,具孔膜,膜上具颗粒,孔膜升高,细窄的沟把孔膜分成两半,在极面观时孔膜为突出于轮廓的两个透明区。外壁厚度约为 3.2 微米,外壁柱状结构明显,小柱在表面形成小瘤或粗颗粒,有时小柱彼此在顶端联接成网状纹饰。

本属现知有两种,产我国西南部。**模式种:辐花**

本属与肋柱花属 Lomatogonium A. Br. 相近,但花冠无腺窝,而具 5 个与裂片对生的附属物,附属物膜质、片状,全缘或上部稍啮蚀状,基部绝不合生成管形。花粉粒较大(而加地肋柱花 *Lomatogonium carinthiacum* (Wulfen.) A. Br. 极轴与赤道面轴长度为 31.3—34.8 微米),三沟细窄,外壁较厚,网状纹饰比较粗而明显,但孔膜的升高和透明区的大小,则次于肋柱花属。两属的区别如下:

1. 花冠裂片基部各具 2 个腺窝,腺窝边缘条裂,下部管形………… **肋柱花属 Lomatogonium** A. Braun
1. 花冠裂片基部不具腺窝,而具 1 个与它对生的附属物,附属物膜质、片状,全缘或上部稍啮蚀状,基部绝不合生成管形……………………………………… **辐花属 Lomatogoniopsis** T. N. Ho et S. W. Liu

Lomatogoniopsis T. N. Ho et S. W. Liu, gen. nov.

Herba annua. Caulis saepe e basi ramosus diffusus, raro simplex. Folia opposita. Flores saepe numerosi ad ramorum apices solitarii vel in corymboso-cymam dispositi,

* 承席以珍同志提供花粉资料、照片,宁汝莲同志绘图,特此致谢。文中 HP 代表中国科学院植物研究所。

raro solitarii terminales, 5-meri, rotati. Calyx partitus, tubo perbrevi. Corolla partita, tubo perbrevi, lobis in alabastro dextrorsum contortis obtegentibus, sub anthesi bicoloribus, efoveolata, appendicibus 5 lobis oppositis membranaceis lamellatis integris vel apice erosis basi in tubos non connatis enervibus instructa. Stamina tubo corollae affixa, lobis eius alternantia. Ovarium 1-loculare, stylo inconspicuo, stigmatibus e gynocei apice secus suturas carpellorum utrinque decurrentibus. Capsula ad suturas 2-valvata. Semina numerosa minima laevia.

Species 2, Sinae austro-occidentalis incola.

Typus generis: L. alpina T. N. Ho et S. W. Liu

Genus novum *Lomatogonio* A. Br. affine, sed corolla efoveolata, appendicibus 5 lobis oppositis membranaceis lamellatis integris vel apice erosis basi in tubos non connatis instructa differt.

1. 辐花 新种 图 **1:1—5**

Lomatogoniopsis alpina T. N. Ho et S. W. Liu, sp. nov

Planta 3—10 cm alta. Caulis purpurascens, saepe e basi ramosus diffusus, raro simplex. Folia basilaria breve petiolata spathulata cum petiolis 5—10 mm longa, 2—5 mm lata; illa caulina sessilia, ovata, 6—11 mm longa, 3—7 mm lata. Flores saepe numerosi in corymboso-cymam dispositi, raro solitarii terminales. Pedicelli purpurascentes, 1—4 cm longi. Calyx corolla dimidio brevior, tubo perbrevi 0.8—1 mm longo, lobis ovatis vel ovato-ellipticis 3.5—6.5 mm longis apice obtuso-rotundatis 3-nerviis. Corolla coerulea, 8—12 mm diametr., tubo perbrevi 1—1.5 mm longo, lobis distincte bicoloribus ellipticis vel elliptico-lanceolatis 5.5—9 mm longis 5-nerviis utrinque papillulatis, appendicibus patentibus pallide coeruleis saepe intense coeruleo-punctatis anguste ellipticis 4—6 mm longis integris vel apice 2-dentatis utrinque papillulatis enervibus. Filamenta complanata, linearia, 3—5 mm longa; antherae coeruleae, oblongae, 1—1.2 mm longae. Ovarium elliptico-lanceolatum, 5—7 mm longum, stigmatibus ad ovarii superam partem decurrentibus. Capsula sessilis, ovato-elliptica, 9—12 mm longa. Semina brunnescentia, subglobosa, 0.8-1 mm longa, laevia.

Qinghai: Zadoi (杂多), on meadow, alt. 4200 m, 23. VIII. 1965, S. W. Liu (刘尚武) 511 (Typus in Herb. Northwest Plateau Inst. Biol. Acad. Sin. conservatur); Jigzhi (久治), under bushes, alt. 4300 m, 19. VIII. 1971, Qinghai Inst. Biol. Golog Exped. (青海生物所果洛考察队) 588; same loc., on meadow, alt. 3950 m, 1. IX. 1971, same Exped. 633.

Xizang: Jomda (江达), on meadow, alt. 4000 m., 28. VIII. 1973, Qinghai Inst. Biol. Tibet. Exped. (青海生物所西藏考察队) 2302; Riwoqe (类乌齐), on the margins of forest, alt. 4000 m, 1. IX. 1976, Qinghai-Xizang Exped. (青藏考察队) 12973。

本种与盔形辐花相似，但花小，常排列成伞房状聚伞花序，花萼比花冠短一半，花冠附属物开展，狭椭圆形，稍短于花冠裂片，全缘或顶端具 **2** 齿，常有深蓝色斑点而不同。

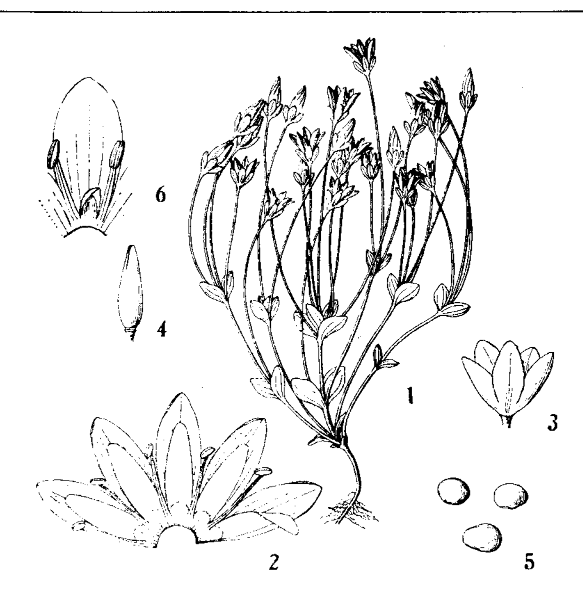


图 11—5.**辐花** **Lomatogoniopsis alpina** T. N. Ho et S. W. Liu 1.全株; 2.花解剖,示花冠及附属物; 3.花萼; 4.子房; 5.种子; 6.**盔形辐花** **Lomatogoniopsis galeiformis** T. N. Ho et S. W. Liu 花解剖,示盔形附属物。(宁汝莲绘)

2. **盔形辐花** 新种 图 1:6

Lomatogoniopsis galeiformis T. N. Ho et S. W. Liu, sp. nov.

Planta 5—8 cm alta. Caulis purpurascens, e basi ramosus, diffusus. Folia basilaria sessilia, anguste elliptica vel ovato-elliptica, 1.2—1.4 cm longa, 2—4 mm lata; illa caulina sessilia ovato-elliptica 4—6 mm longa, 1.5—2.5 mm lata. Flores numerosi ad ramorum apices solitarii. Pedicelli purpurascentes, 3—4.5 mm longi. Calyx corolla duplo brevior, tubo 1—1.2 mm longo basi 5-sacculifero, lobis lanceolatis 4.5—6.5 mm longis apice acutis. Corolla inferne lutea superne coerulea, 1.8—2 cm diametr., tubo 1.5—2 mm longo, lobis ellipticis vel ovato-ellipticis 1.3—1.5 cm longis 3—5-coeruleo-nerviis; appendicibus pallide coeruleis 1.5—2 mm longis superne galeiformibus margine erosis. Filamenta complanata, linearia, 5—6 mm longa; antherae luteae, anguste oblongae, 2—2.2 mm longae. Ovarium lanceolatum, 9—10 mm longum, stigmatibus ad ovarii superam partem decurrentibus. Capsula sessilis, anguste oblonga, 1.3 cm longa. Semina brunnea, globosa, 1 mm diametr., laevia.

Species *L. alpinae* T. N. Ho et S. W. Liu affinis, sed floribus ad ramorum apices solitariis majoribus, calice corolla duplo breviore, appendicibus corollae minoribus superne galeiformibus margine erosis differt.

Xizang: Cona (错那), grassy marshland, alt. 4260 m, 2. X. 1974, Qinghai-Xizang Exped. (青藏考察队) 74-2743 (Typus in HP). Same loc., marshy ground near river, alt. 4360 m., 1. IV. 1974, same Exped. 2919.

本种与辐花相似,但花单生于分枝顶端,较大,花萼比花冠短两倍,花冠附属物小,上部盔形,边缘啮蚀状而不同。